SONY

3-272-961-**11**(1)

Micro HI-FI Component System

Operating Instructions

CMT-DF1

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WARNING

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

To reduce the risk of fire, do not cover the ventilation of the apparatus with newspapers, tablecloths, curtains, etc. And do not place lighted candles on the apparatus.

To reduce the risk of fire or electric shock, do not place objects filled with liquids, such as vases, on the apparatus.

Connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Except for customers in the U.S.A. and Canada

This appliance is classified as a CLASS 1 LASER product. This marking is located on the rear exterior.

CAUTION

CLASS 1M VISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Applicable accessories: Remote commander

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How to use this manual

- This manual mainly explains operations using the remote, but the same operations can also be performed using the buttons on the unit having the same or similar names.
- The OSD (on-screen display) may vary depending on the country model.
- The English OSD screen (on-screen display) is used for illustration purposes only.
- "DVD" may be used as a general term for DVD VIDEOs, DVD+RWs/DVD+Rs and DVD-RWs/DVD-Rs.
- The following symbols are used in this manual.

Symbol	Meaning
DVD-V	Functions available for DVD VIDEOs, DVD-Rs/DVD-RWs in video mode, and DVD+Rs/DVD+RWs
VIDEO CD	Functions available for VIDEO CDs (including Super VCDs or CD-Rs/CD-RWs in video CD format or Super VCD format)
CD	Functions available for music CDs or CD-Rs/CD-RWs in music CD format
DATA-CD	Functions available for DATA CDs (CD-ROMs/CD-Rs/CD-RWs containing MP3* files, JPEG files and DivX files)
DATA DVD	Functions available for DATA DVDs (DVD-Rs/DVD-RWs/DVD+Rs/DVD+RWs) containing DivX files

*MP3 (MPEG1 Audio Layer 3) is a standard format defined by ISO/MPEG which compresses audio data.

Playable discs

You can play back the following discs on this system. Other discs cannot be played back.

List of playable discs

Format of discs	Disc logo
DVD VIDEOs	
DVD-RWs/ DVD-Rs	
DVD+RWs/ DVD+Rs	
VIDEO CDs	
Audio CDs	
CD-Rs/CD-RWs	

"DVD VIDEO," "DVD-R" and "DVD-RW" logos are trademarks.

Region code of DVDs you can play on this system

Your system has a region code printed on the back of the unit and will only play DVDs labeled with identical region code.

DVDs labeled will also be played on this system.

If you try to play any other DVD, the message "Wrong Region" will appear on the TV screen. Depending on the DVD, no region code indication may be labeled even though playing the DVD is prohibited by area restrictions.

Discs that this system cannot play

- CD-ROMs (except for extension ".MP3", ".JPG" or ".JPEG")
- CD-Rs/CD-RWs other than those recorded in the following formats:
  - music CD format
  - video CD format
  - MP3 (MPEG1 Audio Layer-3)/JPEG/DivX format that conforms to ISO9660* Level 1/ Level 2 or Joliet
- CD-ROMs recorded in PHOTO CD format.
- Data part of CD-Extras
- Super Audio CDs
- DVD-ROMs/DVD-Rs/DVD-RWs/DVD+Rs/ DVD+RWs other than those recorded in DivX format conforming to Universal Disk Format (UDF).
- DVD-ROMs/DVD-Rs/DVD-RWs/DVD+Rs/ DVD+RWs recorded in Multi Session
- DVD-RAMs
- DVD Audio discs
- A DVD with a different region code.
- DVD+R DL (Double layer) discs
- DVD+Rs/DVD+RWs recorded in VR (Video Recording) mode
- Photo-movies created after shooting on a DVD camcorder in VR (Video Recording format) mode
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this unit. Attempting to do so may damage the unit. Do not use such discs.
- A disc with paper or stickers on it.
- A disc that has the adhesive, cellophane tape, or a sticker still left on it.

* A logical format of files and folders on a CD-ROMs, defined by ISO (International Organization for standardization).

Notes about CD-R/CD-RW/ DVD-R/DVD-RW (Video mode)/ DVD+R/DVD+RW

- In some cases, CD-Rs, CD-RWs, DVD-Rs, DVD-RWs (Video mode) (DVD-RWs created in video mode have the same format as a DVD VIDEO), DVD+R or DVD+RW cannot be played on this system depending upon the recording quality or physical condition of the disc, or the characteristics of the recording device. Furthermore, the disc will not play if it has not been correctly finalized. For more information, see the operating instructions for the recording device. Note that some playback functions may not work with some DVD+RWs/ DVD+Rs, even if they have been correctly finalized.
- A disc recorded in packet write format cannot be played.

Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally set by software producers. Since this system plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also, refer to the instructions supplied with the DVDs or VIDEO CDs.

continued

Music discs encoded with copyright protection technologies

This product is designed to playback discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Note on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Cautions when playing a disc that is recorded in Multi Session

- This system can play Multi Session CDs when an MP3 file (JPEG file) is contained in the first session. Any subsequent MP3 files (JPEG files) recorded in later sessions can also be played back.
- If audio tracks and images in music CD format or video CD format are recorded in the first session, only the first session will be played back.
- When playing a disc which contains audio tracks in music CD format, MP3 files and JPEG files, only the audio tracks in music CD format can be played back.
- CD-R and CD-RW discs recorded in multi-session that have not ended by "closing the session" are not supported.
- With CD-ROMs/CD-Rs/CD-RWs that contain DivX files in addition to MP3 files or JPEG files, the system plays only the DivX files.

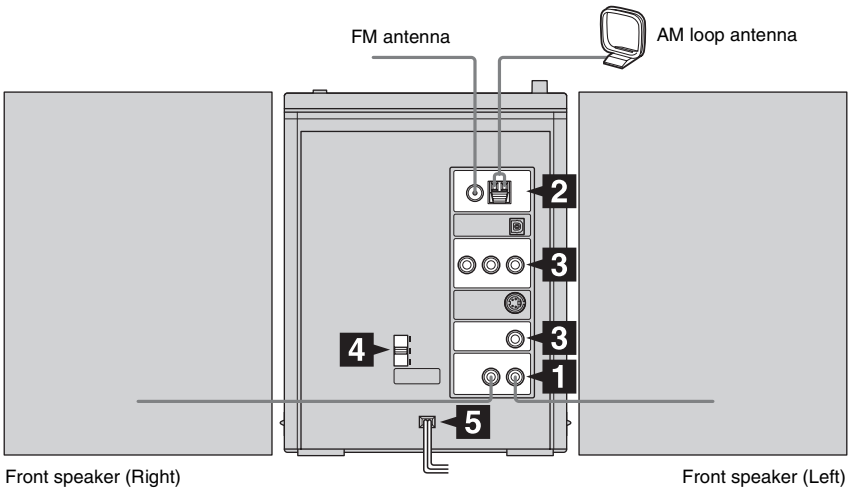
Copyrights

This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.

- This system incorporates Dolby[1)] Digital and DTS[2)] Digital Surround System.
  [1)] Manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
  [2)] Manufactured under license from Digital Theater Systems, Inc. "DTS" and "DTS 2.0 + Digital Out" are trademarks of Digital Theater Systems, Inc.
- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.
- DivX® is a video file compression technology, developed by DivX, Inc.
  DivX, DivX Certified, and associated logos are trademarks of DivX, Inc. and are used under license.

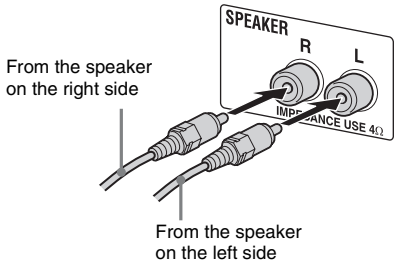
Hooking up the system

Perform the following procedures **1** to **7** to hook up your system using the supplied cords and accessories.



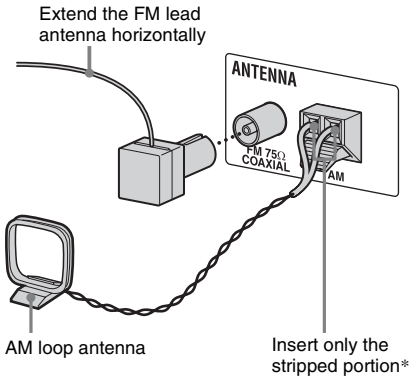
1 **Connect the speakers.**

There is no right or left designation for the speakers. Connect the speaker located on the right side as viewed from the front of the system to the SPEAKER R jack, and the speaker located on the left side to the SPEAKER L jack.



2 **Connect the FM and AM antennas.**

Set up the AM loop antenna, then connect it.



* Strip off an end-portion of wire covering.

continued

Note

Keep the antennas away from the speaker cords.

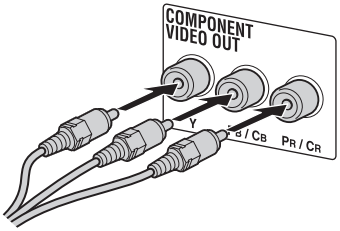
3 Connect a TV.

Select one of the following connections.

Connection Ⓐ

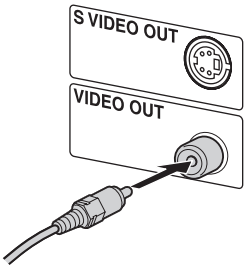
If your TV has component video input jacks, connect your TV to the COMPONENT VIDEO OUT jacks with a component video cord (not supplied).

If your TV is compatible with progressive format file signals, use this connection and set the system to the progressive scan mode. For details, see "To change the type of signal output from the system" (page 23).



Connection Ⓑ

Connect the video input jack of your TV to the VIDEO OUT jack with the video cord (supplied).

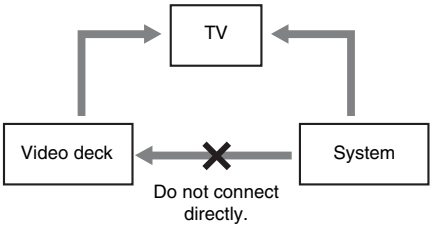


When using a TV

Turn on the TV and select the video input so that you can view the pictures from this system.

When connecting a video deck

Connect the TV and the video deck using video and audio cords (not supplied) as shown below.



If you connect a video deck between this system and the TV, you may experience video leakage when watching the video signal from this system. Do not connect a video deck between this system and the TV.

Note

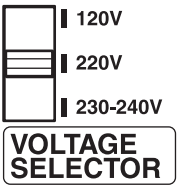
Do not place the TV on this system.

Tip

For even higher quality video images, you can use an optional S video cord to connect the S VIDEO input jack on your TV to the S VIDEO OUT jack (page 34).

4 For models with a voltage selector, set the VOLTAGE SELECTOR to the local power line voltage.

Depending on the model, the VOLTAGE SELECTOR may differ.



5 Connect the power cord to a wall outlet.

If the supplied adapter on the plug does not fit your wall outlet, detach it from the plug (only for models equipped with an adapter).

6 Turn on the system.

Press POWER on the unit.

After you press POWER on the unit and turn on the power, you can turn the system on and off by pressing I/⏻ on the remote.

Notes

- Power remains supplied to the system until you press POWER on the unit again to set it to off.
- You cannot operate the system using the remote unless POWER on the unit has been pressed.
- When you will not use the system for a long time, press POWER to set it to off.

7 Set the color system to PAL or NTSC depending on the color system of your TV.

The color system is factory set to NTSC for region code 3 models, and PAL for other region code models.

Each time you press PAL/NTSC, the color system changes as follows:

NTSC ⟶ PAL ⟶ Multi ⟶ NTSC (P-Scan) ⟶ PAL (P-Scan) ⟶ Multi (P-Scan) ⟶ NTSC ⟶ ...

Notes

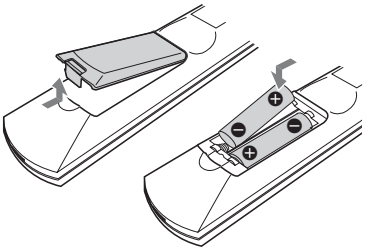
- A disturbance in the TV screen may be present for a moment after changing the color system as described above.
- When you play back a disc recorded in a different color system from the one you set to the unit, the picture image may be distorted.
- To set the color system, see page 22.

To connect optional components

See page 34.

Inserting two R6 (size AA) batteries into the remote

Slide and remove the battery compartment lid, and insert the two supplied R6 (size AA) batteries, ⊖ side first, matching the polarities shown below.



Note

If you do not use the remote for a long period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

Tip

With normal use, the batteries should last for about six months. When the remote no longer operates the system, replace both batteries with new ones.

Selecting a language

DVD-V VIDEO CD CD DATA-CD DATA DVD

You can change the on-screen display language.

1 **Turn on your TV and select the video input.**

2 **Press I/⏻ to turn on the system.**

3 **Press DVD (or FUNCTION + or – repeatedly) to switch the function to DVD.**

Playback starts automatically if a disc with auto playback function is loaded. Press ■ to stop playback.

4 **Press SETUP in stop mode.**

The Setup Menu appears.

5 **Press ← or → repeatedly to select "General Setup Page," then press ENTER.**

6 **Press ↑ or ↓ repeatedly to select "OSD Lang," then press ENTER.**

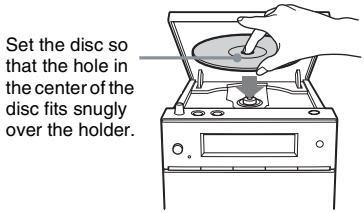
7 **Press ↑ or ↓ repeatedly to select a language from the displayed list, then press ENTER.**

8 **Press SETUP to turn off the Setup Menu.**

Loading a disc

1 **Press ⏏ OPEN on the unit.**

2 **Place a disc with the label side up in the disc compartment so that the hole in the center of the disc fits snugly over the holder.**



3 **Close the disc compartment.**

Note

Do not use a disc with tape, seals or paste on it as this may cause malfunction.

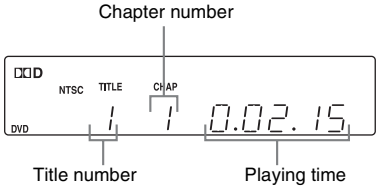
Playing a disc

— Normal Play

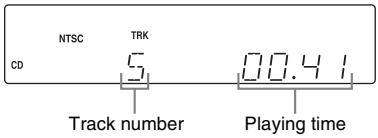
DVD-V VIDEO CD CD

Before playing a DVD or VIDEO CD, turn on your TV and select the video input. Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the operating instructions supplied with the disc.

Example: When playing a DVD



Example: When playing a CD



1 **Press DVD (or FUNCTION + or – repeatedly) to switch the function to DVD.**

Playback starts automatically if a disc with auto playback function is loaded.

2 **Load a disc.**

Playback starts automatically when you close the disc compartment.

If the playback does not start automatically, press ▷ (or ►II on the unit).

continued

Other operations

To	Do this
Stop play	Press ■.
Pause	Press ❚❚ (or ►❚❚ on the unit).[1)] Press ▷ (or ►❚❚ on the unit) to resume play.
Select a track or chapter	Press ⏮ or ⏭ repeatedly during play or pause. Press ⏮ once during play or pause to go back to the beginning of the current track or chapter.
Locate a point quickly in fast forward or fast reverse (Scan)[2)]	Press ◀◀ or ▶▶ (or hold ◀◀ or ▶▶ on the unit) during play. Each time you press or hold the button, searching speed changes. To return to Normal Play, press ▷ (or ►❚❚ on the unit).
Watch frame by frame (Slow-motion Play) (DVD/VIDEO CD only)[1)2)]	During play, press ◄❚ SLOW[3)] or SLOW ❚►. Each time you press the button, the playback speed changes. To return to Normal Play, press ▷ (or ►❚❚ on the unit).
Enlarge the pictures (DVD/VIDEO CD only)	Press ZOOM. Each time you press the button, the zoom scale changes. To return to the normal size, press ZOOM repeatedly until the scale returns to the normal size.
Switch to DVD function from another source	Press DVD (or ►❚❚ on the unit) (Automatic Source selection). Playback starts automatically when a disc with auto playback function is loaded.
Cut the sound	Press MUTING. Press MUTING again or VOLUME + to restore sound.
Remove a disc	Press ⏏ OPEN on the unit in stop mode.

[1)] There may be some disturbance in the video image.
[2)] No sound is output.
[3)] DVD only

Note

Depending on the DVD or VIDEO CD, some operations may be restricted.

Resuming playback from the point you stopped the disc

— Resume Play (DVD/VIDEO CD/CD only)

This system memorizes the point where you stopped the disc so you can resume from that point.

1 While playing a disc, press ■ to stop play.

"RESUME" appears in the front panel display. If "RESUME" does not appear, Resume Play is not available.

2 Press ▷ (or ►❚❚ on the unit).

Playback starts from the point you stopped the disc in step 1.

Notes

- Resume Play may not work properly with some discs.
- Depending on where you stop the disc, the system may not resume playback from exactly the same point.
- Resume play is canceled when:
  - you press ■ in stop mode.
  - you turn off the system.
  - you open the disc compartment.
  - you change the function.

Playing a chapter/track by entering the number in Normal Play mode (on the remote only)

Press the number button(s) to enter the number of the chapter or track you want to play.

Example:

To play chapter/track number 5, press 0 and 5.
To play chapter/track number 30, press 3 and 0.

Playing DVDs using the menu

DVD-V

A DVD is divided into a lot of sections, which make up a picture or music feature. These sections are called “titles.” When you play a DVD which contains several titles, you can select the title you want using TOP MENU. When you play DVDs that allow you to select items such as the language for the subtitles and the language for the sound, select these items using MENU/PBC.

1 Press TOP MENU or MENU/PBC.

The disc’s menu appears on the TV screen. The contents of the menu vary from disc to disc.

2 Press ↑/↓/←/→ or the number buttons to select the item you want to play or change.

3 Press ENTER.

Playing VIDEO CDs with PBC functions (Ver. 2.0)

— PBC Play

VIDEO CD

You can use PBC* menus on your TV screen to enjoy the disc’s interactive software. The menu format and structure may differ depending on each disc.

* PBC: Playback Control

1 Press DVD (or FUNCTION + or – repeatedly) to switch the function to DVD.

2 Load a VIDEO CD with PBC functions (Ver. 2.0).

Playback starts and the PBC menu appears on the TV screen.

3 Press the number buttons to select the item number you want.

Enter the number as two digits. For example, to select “1” enter “01.”

4 Continue playback according to the instructions on the menus to enjoy interactive playback.

Refer to the operating instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.

To go back to a previous menu

Press ↩ RETURN.

continued

To cancel playback with PBC functions

1 Press ■ twice to cancel Resume Play (page 12).

2 Press SETUP.

The Setup Menu appears.

3 Press ← or → repeatedly to select "Preference Page," then press ENTER.

4 Press ↑ or ↓ repeatedly to select "PBC," then press ENTER.

5 Press ↑ or ↓ repeatedly to select "Off," then press ENTER.

6 Press SETUP to turn off the Setup Menu.

7 Press ▷ (or ►II on the unit).

Playback starts from the first track. Still images, such as the menu screens, will not be shown. To return to PBC playback, repeat steps 1 through 7, selecting "On" in step 5.

Tip

Each time you press MENU/PBC the setting switches between "PBC On" and "PBC Off."

Playing MP3/JPEG/DivX® files

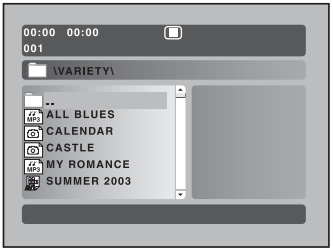
DATA-CD DATA DVD

Before playing MP3 files, JPEG files or DivX files, turn on your TV and select the video input.

1 Press DVD (or FUNCTION + or – repeatedly) to switch the function to DVD.

2 Load a DATA CD or DATA DVD.

The file list appears.



3 Press ↑/↓/←/→ repeatedly to select the file you want to play.

Press ↑ or ↓ repeatedly to browse up and down through the contents in the folder.

Select a folder and press ENTER or → to go inside the folder.

Select the folder at the top of the list and press ENTER or ← to return to the parent folder.

4 Press ▷ (or ►II on the unit).

Playback starts from the selected file.

If you selected a JPEG file, the slide show starts.

Other operations

To	Do this
Stop play	Press ■ when playing an MP3 file or DivX file. Press MENU/PBC when playing a JPEG file.
Pause	Press ❚❚ (or ►❚❚ on the unit).[1)] Press ▷ (or ►❚❚ on the unit) to resume play.
Locate a point quickly in fast forward or fast reverse (Scan) (Except for JPEG)[2)]	Press ◄◄ or ►► (or hold down ◄◄ or ►► on the unit) during play. Each time you press or hold the button, searching speed changes. To return to Normal Play, press ▷ (or ►❚❚ on the unit).
Watch frame by frame (Slow-motion Play) (DivX only)[1)2)]	During play, press SLOW ❚►[3)]. Each time you press the button, the playback speed changes. To return to Normal Play, press ▷ (or ►❚❚ on the unit).
Enlarge the pictures (DivX/JPEG only)	Press ZOOM. For DivX files, the zoom scale changes each time you press the button. To return to the normal size, press ZOOM repeatedly until the scale returns to the normal size. For JPEG files, press ZOOM and then press ◄◄ or ►► repeatedly to change the zoom scale. Press ZOOM again to return to the normal size.
Flip the current image (JPEG only)	Press ↑ to flip the image vertically. Press ↓ to flip the image horizontally.
Rotate the current image (JPEG only)	Press ← or →. Each time you press →, the image turns clockwise by 90º. Each time you press ←, the image turns counterclockwise by 90º.
Cut the sound	Press MUTING. Press MUTING again or VOLUME + to restore sound.
Remove a disc	Press ⏏ OPEN on the unit in stop mode.

[1)] There may be some disturbance in the video image.
[2)] No sound is output.
[3)] ◄❚ SLOW does not function for DivX files.

To select a JPEG file in the Thumbnail Display

1 Press ■ while viewing a JPEG file.

The JPEG files in the same folder as the selected JPEG file appear as thumbnail images.

2 Press ↑/↓/←/→ repeatedly to select a JPEG file you want to view, then press ENTER.

To go to the next screen, press ↑/↓/←/→ repeatedly to select Next ►, then press ENTER. To return to the previous screen, select ◄ Prev, then press ENTER.

To return to the file list from the Thumbnail Display

Press MENU/PBC.

Notes on the file list

- On the TV screen, up to 14 characters can be displayed for folder and file names.
- Only the letters in the alphabet and numbers can be used for folder or file names. Anything else is displayed as "-".
- If an MP3 file is played, indicated elapsed time may be different from the actual time.

Notes on MP3/JPEG files

- The maximum number of:
  - folders on a disc is 255.
  - MP3/JPEG files on a disc is 999.
  - MP3/JPEG files that can be contained in a single folder is 640.

  However, when a large number of non-MP3/JPEG files are present, the maximum number of folders and files may decrease.
- For data CD, playback is possible up to 16 levels.
- The system supports MP3 files recorded with a bit rate of 32 to 320 kbps and a sampling frequency of 32/44.1/48 kHz for MPEG1 Audio Layer-3.
- If you put the extension ".MP3" to data not in MP3 format, the system cannot recognize the data properly and will generate a loud noise which could damage your speaker system.

continued

- The following discs take a longer time to start playback.
  - a disc recorded with complicated tree structure.
  - a disc recorded in Multi Session.
  - a disc to which data can be added (non-finalized disc).
- Some CD-Rs or CD-RWs cannot be played on this system depending on file format.

Notes on DivX files

- The system may not play a DivX file when the file has been combined from two or more DivX files.
- The system cannot play a DivX file of size more than 640 (width) × 480 (height).
- Depending on the DivX file, the picture may be unclear or the sound may skip.
- The system cannot play some DivX files that are longer than 3 hours.
- If there are no DivX files recorded on a DATA DVD, a message appears to indicate that the disc is not playable.
- Depending on the DivX file, the picture may pause or be unclear. In which case, it is recommended that you create the file at a lower bit rate. If the sound is still noisy, MP3 is the recommended audio format. Note, however, this system does not conform to WMA (Windows Media Audio) format.
- Because of the compression technology used for DivX files, it may take some time after you press ▷ (or ►II on the unit) for the picture to appear.
- Depending on the DivX file, the sound may not match the pictures on the screen.
- The playback order may differ depending on the software used for creating the DivX file.
- The system can recognize up to 600 DivX files in a single folder. A maximum of 200 folders can be recognized.

Tips

- You can view the disc information while playing a DivX file (page 32).
- If the number of viewing times is preset, you can play the DivX files as many times as the preset number.

Disc – Various Play

Playing repeatedly

— Repeat Play

DVD-V VIDEO CD CD DATA-CD DATA DVD

You can play a whole disc or selected folder repeatedly or you can also play a single title/chapter/track/file repeatedly.

Using the front panel display

Press REPEAT repeatedly during play.

Each time you press the button, the setting changes cyclically as follows:

■ When playing a DVD

- REPEAT 1: repeats the current chapter.
- REPEAT: repeats the current title.
- REPEAT ALL: repeats all the titles on the disc.

■ When playing a VIDEO CD/CD or MP3/JPEG/DivX file

- REPEAT 1: repeats the current track/file.
- REPEAT ALL: repeats all the tracks/files on the disc.

To cancel Repeat Play

Press REPEAT repeatedly until “REPEAT” disappears.

Notes

- You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 13).
- When you select “REPEAT 1,” that chapter/track/file is repeated endlessly until “REPEAT 1” is canceled.

Using the on-screen display

Press REPEAT repeatedly during play.

Each time you press the button, the setting changes cyclically as follows:

■ When playing a DVD

- No display: does not play repeatedly.
- Chapter: repeats the current chapter.
- Title: repeats the current title.
- ALL: repeats all the titles on the disc.

■ When playing a VIDEO CD/CD

- No display: does not play repeatedly.
- Track: repeats the current track.
- ALL: repeats all the tracks on the disc.

■ When playing an MP3/JPEG/DivX file

- Repeat Off: does not play repeatedly.
- Repeat One: repeats the current file.
- Repeat All: repeats all the files in the folder.

Note

The above displays disappear after a few seconds.

To cancel Repeat Play

■ When playing a DVD

Press REPEAT repeatedly until "Chapter," "Title" and "ALL" disappear.

■ When playing a VIDEO CD/CD

Press REPEAT repeatedly until both "Track" and "ALL" disappear.

■ When playing an MP3/JPEG/DivX file

Press REPEAT repeatedly until "Repeat Off" appears.

Notes

- You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 13).
- Repeat Play is canceled when:
  - you turn off the system.
  - you open the disc compartment.
  - you switch to other functions except DVD.

Playing in random order

— Random Play

DVD-V VIDEO CD CD DATA-CD DATA DVD

You can play a whole disc or selected folder in random order.

Using the front panel display

Press RANDOM repeatedly during play until "RANDOM" appears.

Random Play starts from the next title/chapter/track/file.

To cancel Random Play

Press RANDOM repeatedly until "RANDOM" disappears.

Note

You cannot perform Random Play during PBC playback of VIDEO CDs (page 13).

Using the on-screen display

Press RANDOM repeatedly during play until "Random" appears.

Random Play starts from the next title/chapter/track/file.
Each time you press the button, the setting changes cyclically as follows:

■ When playing a DVD

- No display: does not play in random order.
- Random: plays all the titles/chapters on the disc in random order.

■ When playing a VIDEO CD/CD

- No display: does not play in random order.
- Random: plays all the tracks on the disc in random order.

■ When playing a JPEG/DivX file

- Off: does not play in random order.
- Random: plays all the files in the folder in random order.

continued

To cancel Random Play

■ When playing a DVD/VIDEO CD/CD

Press RANDOM repeatedly until "Random" disappears.

■ When playing a JPEG/DivX file

Press RANDOM repeatedly until "Off" appears.

Notes

- You cannot perform Random Play during PBC playback of VIDEO CDs (page 13).
- Random Play is canceled when:
  - you turn off the system.
  - you open the disc compartment.
  - you switch to other functions except DVD.
- You cannot perform Random Play for MP3 files.

Using the on-screen display to search

DVD-V VIDEO CD

You can search for a title or chapter (DVD) and track (VIDEO CD). As titles, chapters and tracks are assigned unique numbers on the disc, so you can select the desired one by entering its number. Or, you can search for a particular point using the time code (Time Search).

Note

The search function does not work in Random Play (page 17).

Searching for a title/chapter (DVD only)

1 Press SEARCH during play.

The Menu Display appears.

2 Press ↑ or ↓ repeatedly to select "Title" or "Chapter," then press ENTER.

3 Press the number buttons to select the desired title or chapter number.

Playback starts from the selected number.

4 Press SEARCH to turn off the Menu Display.

Note

The search function does not work for DVDs when Resume Play is canceled (page 12).

Searching for a track (VIDEO CD only)

1 Press SEARCH during play.

The Menu Display appears.

2 Press ↑ or ↓ repeatedly to select "Track," then press ENTER.

3 Press the number buttons to select the desired track number.

Playback starts from the selected number.

4 Press SEARCH to turn off the Menu Display.

Note

The track search function does not work during PBC playback of VIDEO CDs.

Searching for a particular point using the time code (DVD/VIDEO CD only)

— Time Search

1 Press SEARCH during play.

The Menu Display appears.

2 Press SEARCH repeatedly to select the desired searching method.

■ When playing a DVD
Select "TT Time" (Title Time) or "CH Time" (Chapter Time), then press ENTER.

■ When playing a VIDEO CD
Select "Disc Time" or "Track Time," then press ENTER.

3 Press the number buttons to input the time code.

4 Press SEARCH to turn off the Menu Display.

Note

The Time Search function does not work during PBC playback of VIDEO CDs.

To cancel searching

Press SEARCH repeatedly until the Menu Display disappears.

Disc – Various functions

Changing the sound/ subtitle/angle

DVD-V VIDEO CD CD DATA-CD DATA DVD

Changing the sound

When playing a DVD or DATA CD/DATA DVD (DivX files) recorded in multiple audio formats (PCM, Dolby Digital, MPEG audio or DTS), you can change the audio format. If the DVD is recorded with multilingual tracks, you can also change the language.
With VIDEO CDs or CDs, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. For example, when playing a disc containing a song with the vocals on the right channel and the instruments on the left channel, you can hear the instruments from both speakers by selecting the left channel.

Press AUDIO repeatedly during play.

Each time you press the button, the setting changes cyclically as follows:

■ When playing a DVD

Depending on the DVD, the choice of the language and audio format varies.
When the same language is displayed twice or more times, the DVD is recorded in multiple audio formats.

■ When playing a VIDEO CD/CD

- Mono Left: The sound of the left channel (monaural).
- Mono Right: The sound of the right channel (monaural).
- Mix-Mono: The sound of the left and right channels mixed.
- Stereo: The standard stereo sound.

■ When playing a DivX file

The choice of DATA CD or DATA DVD audio signal formats differ, depending on the DivX file contained on the disc. The format is shown in the TV screen.

To preset the desired audio track

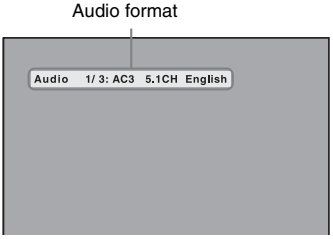
You can preset the system to the desired audio track with the operations described under "Changing the language" (page 21).

Notes

- When you play a DVD with the audio other than 2 channels, the sound is composed into 2 channels and output from the system speakers. However, sound is not output in "Multi Channel PCM" format.
- For discs not recorded in multiple audio format, you cannot change the sound.
- Depending on the DVD, you may not be able to change the sound even if the DVD is recorded in multiple audio format.
- For VIDEO CDs and CDs, the setting returns to "Stereo" when you turn off the system or open the disc compartment.
- During DVD playback, the sound may change automatically.

Displaying the audio information of the disc (DVD/ DivX only)

When you press AUDIO repeatedly during play, the audio signal format (PCM, Dolby Digital, DTS, etc.) is displayed on the TV screen.
For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD. Depending on the DVD, the number of recorded channels may differ.



Displaying the subtitles (DVD only)

With DVDs on which multilingual subtitles are recorded, you can change the subtitle language while playing a DVD, or turn the subtitles on or off whenever you want.

Press SUBTITLE repeatedly during play.

Each time you press the button, the language changes.

To cancel the subtitle setting

Press SUBTITLE repeatedly to select "Subtitle Off."

Note

Depending on the DVD, you may not be able to change the subtitles even if multilingual subtitles are recorded on the DVD.

Changing the angles (DVD only)

When playing a DVD on which various angles (multi-angles) for a scene are recorded, you can change the viewing angle.

Press ANGLE repeatedly during play.

Each time you press the button, the angle changes.

Note

Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the DVD.

Changing the language

— Language

DVD-V

1 **Press ■ twice to cancel Resume Play (page 12).**

2 **Press SETUP in stop mode.**

The Setup Menu appears.

3 **Press ← or → repeatedly to select "Preference Page," then press ENTER.**

4 **Press ↑ or ↓ repeatedly to select an item, then press ENTER.**

■ Audio (DVD only)
Switches the language of the sound track. Select the language from the displayed list.

■ Subtitle (DVD only)
Switches the language of the subtitle. Select the language from the displayed list.

■ Disc Menu (DVD only)
Select the language for the DVD menu.

5 **Press ↑ or ↓ repeatedly to select a language, then press ENTER.**

6 **Press SETUP to turn off the Setup Menu.**

To change the on-screen display language

Select "General Setup Page" in step 3, then select "OSD Lang." For details, see "Selecting a language" (page 10).

Note

When the selected language is not recorded on the DVD, one of the recorded languages is automatically selected.

Tip

You can reset all the settings except for Parental Control by performing the operations described under "To return the settings to the default settings*, perform reset as follows:" (page 40).

* Except for Parental Control settings

Adjusting the image settings

— General Setup/Video Setup

DVD-V VIDEO CD DATA-CD

1 Press SETUP in stop mode.

The Setup Menu appears.

2 Press ← or → repeatedly to select "General Setup Page" or "Video Setup Page," then press ENTER.

3 Press ↑ or ↓ repeatedly to select an item, then press ENTER.

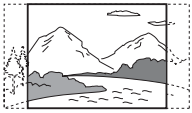
4 Press ↑ or ↓ repeatedly to select a setting, then press ENTER.

5 Press SETUP to turn off the Setup Menu.

General Setup

■ TV Display

Select the aspect ratio of the connected TV. The default setting is underlined.

Normal/PS	Select this when you connect a 4:3 screen TV. This setting displays the wide picture on the entire screen and cuts off the portions that do not fit. 
Normal/LB	Select this when you connect a 4:3 screen TV. This setting displays a wide picture with bands displayed on the upper and lower portions of the screen.
Wide	Select this when you connect a wide-screen TV or a TV with a wide mode function.

Note

Depending on the DVD, "Normal/LB" may be selected automatically instead of "Normal/PS" or vice versa.

■ Angle Mark (DVD only)

Turns on and off the multi-angle icon when playing a DVD with multi-angle function. The default setting is underlined.

On	Turns on the multi-angle icon.
Off	Turns off the multi-angle icon.

Video Setup

■ TV Type

Select the color system when you play a disc. The default setting is "PAL" for European model and "Multi" for other models.

PAL	Changes the video signal of an NTSC disc and outputs it in the PAL system.
Multi	Outputs the video signal in the system of the disc, either PAL or NTSC. If your TV uses a dual system, select "Multi."
NTSC	Changes the video signal of a PAL disc and outputs it in the NTSC system.

■ Component/S

When connecting the TV to the COMPONENT VIDEO OUT jack or the S VIDEO OUT jack on the back of the system, switch this setting according to the connection. The picture will not appear properly if this setting is not correct. The default setting is underlined.

S-VIDEO	Select this when connecting to the S VIDEO OUT jack.
COMPONENT	Select this when connecting to the COMPONENT VIDEO OUT jack.

■ DivX VOD

DivX VOD files can be downloaded from certain commercial websites by paying a rental fee. Before downloading a DivX VOD file, you must input the registration number of your system using the purchase form on the website.

Done	Displays the registration code for this system. For more information, go to http://www.divx.com on the Internet.

Notes

- If you cannot play a downloaded DivX VOD file that you have recorded on a CD-R, the rental period may have elapsed. Other possible reasons may be that the version is incorrect, or the settings were incorrect when you downloaded the file or recorded it on a CD-R. For details on DivX VOD files, refer to http://www.divx.com.
- You can change the color system of this unit according to the connected TV (page 9).

Tip

You can reset all the settings except for Parental Control by performing the operations described under "To return the settings to the default settings*, perform reset as follows:" (page 40).

* Except for Parental Control settings

To change the type of signal output from the system

— Progressive

Progressive is the method for displaying TV images which reduces flickering, and sharpens the image. To display using this method, you need to connect to a TV that accepts progressive signals.

1 Press DVD (or FUNCTION + or – repeatedly) to switch the function to DVD.

Playback starts automatically if a disc with auto playback function is loaded. Press ■ to stop playback.

2 Press PROGRESSIVE on the unit.

Each time you press PROGRESSIVE on the unit, the on-screen display changes as follows:

P-SCAN* ⟷ Interlace (default setting)

* "PROGRE" appears in the front panel display when the system outputs progressive signals.

■ P-SCAN

Select this setting when your TV accepts progressive signals and the TV is connected to the COMPONENT VIDEO OUT jacks. Normally select this setting under the above condition.
Note that the picture will not be clear or no picture will appear if you select these settings when either of the above conditions is not met.

■ Interlace (default setting)

Select this setting when your TV does not accept progressive signals or your TV is connected to the VIDEO OUT jack.

About DVD software types and the conversion method

DVD software can be divided into 2 types: film-based software and video-based software. Video-based software is derived from TV, such as dramas and sit-coms, and displays images at 30 frames/60 fields per second. Film-based software is derived from film and displays images at 24 frames per second. Some DVD software contains both video and film.
In order for these images to appear natural on your screen when output in progressive format, the progressive signals need to be converted to match the type of DVD software that you are watching.

Note

When you play video-based software in progressive signal format, sections of some types of images may appear unnatural due to the conversion process when output through the COMPONENT VIDEO OUT jacks. Even though you set to "P-SCAN," images from the VIDEO OUT jack are unaffected as they are output in the interlace format.

Adjusting the audio settings

— Audio Setup

DVD-V VIDEO CD DATA-CD

1 Press SETUP in stop mode.

The Setup Menu appears.

2 Press ← or → repeatedly to select "Audio Setup Page," then press ENTER.

3 Press ↑ or ↓ repeatedly to select "Speaker Setup" or "SPDIF Setup," then press ENTER.

4 Press ENTER again.

5 Press ↑ or ↓ repeatedly to select a setting, then press ENTER.

6 Press SETUP to turn off the Setup Menu.

Speaker Setup

■ Downmix

When playing 5.1 channel sound, this switches how the rear speaker sound is output from the system speakers.
The default setting is underlined.

LT/RT	Select this to mix the rear left and right channel sound to monaural and output it combined with each of the front left and right channels.
Stereo	Select this to output the rear left channel sound combined with the front left channel sound, and the rear right channel sound combined with the front right channel sound.

SPDIF Setup

■ SPDIF Output

This switches the method for outputting 5.1 channel sound from the DIGITAL OUT (OPTICAL) jack on the back of the system.
The default setting is underlined.

SPDIF Off	Sound is not output from the DIGITAL OUT (OPTICAL) jack.
SPDIF/RAW	Select this to enjoy 5.1 channel sound when an optional amplifier is connected (see "Enjoying the 5.1 channel sound with the optional amplifier" (page 35)).
SPDIF/PCM	Select this to enjoy 2 channel PCM sound when an optional amplifier is connected.

Tip

You can reset all the settings except for Parental Control by performing the operations described under "To return the settings to the default settings*, perform reset as follows:" (page 40).

* Except for Parental Control settings

Restricting disc playback

— Parental Control

DVD-V

Setting the password

The password is set to “136900” at the factory. Before setting Parental Control, change the password to a 6-digit number of your choice. If you forget the password, you can also set a new password by this same method.

1 **Remove the disc if it is loaded.**

2 **Press SETUP.**

The Setup Menu appears.

3 **Press ← or → repeatedly to select “Password Setup Page,” then press ENTER.**

4 **Press ↑ or ↓ to select “Password,” then press → to select “Change.”**

5 **Press ENTER.**

6 **Enter “136900” to “Old Password” section using the number buttons.**

7 **Enter a new 6-digit password to “New Password” section using the number buttons.**

8 **Enter the new 6-digit password again to “Confirm PWD” section to confirm, then press ENTER.**

The new password is set.

Limiting playback by children

You can limit the playback of some DVDs according to a predetermined level such as the age of the users.
When a limited scene is played back, that scene is cut or replaced with a preset other scene.

Note

You cannot set Parental Control unless “Password Mode” of “Password Setup Page” is set to “On.” “Password Mode” is set to “On” at the factory. For details, see “To turn on and off the Parental Control function” (page 26).

1 **Load the disc for which you want to set Parental Control.**

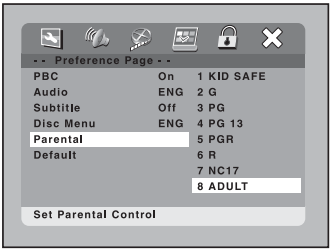
2 **Press ■ twice to cancel Resume Play (page 12).**

3 **Press SETUP.**

The Setup Menu appears.

4 **Press ← or → repeatedly to select “Preference Page,” then press ENTER.**

5 **Press ↑ or ↓ to select “Parental,” then press ENTER.**

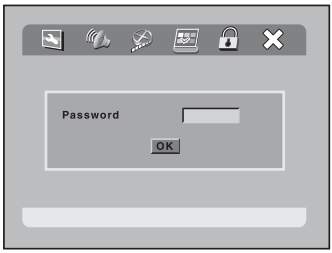


6 **Press ↑ or ↓ repeatedly to select the level you want, then press ENTER.**

The lower the value, the more strict the limitation.

continued

7 **Enter your 6-digit password using the number buttons, then press ENTER.**



The Parental Control setting is completed.

If you enter the 6-digit password but "OK" is not selected automatically, the password you entered was incorrect. Enter the correct password.

If you make a mistake while entering the password, either continue entering numbers until the entry box is cleared, or press ↓ to select "OK," then press ENTER and repeat the procedure from step 4.

To turn on and off the Parental Control function

1 In step 4, select "Password Setup Page," then press ENTER.

2 Press ↑ or ↓ to select "Password Mode," then press ENTER.

3 Press ↑ or ↓ to select "On" or "Off," then press ENTER.

4 Enter your 6-digit password using the number buttons, then press ENTER.

Playing the disc for which Parental Control is set

1 **Load the disc and press DVD (or FUNCTION + or – repeatedly) to switch the function to DVD.**

The Password Display appears.

2 **Enter your 6-digit password using the number buttons, then press ENTER.**

Playback starts.

Notes

- When you play DVDs which do not have the Parental Control function, playback cannot be limited on this system.
- Depending on the DVD, you may be asked to change the parental control level while playing the disc. In this case, enter your password, then change the level. If the Resume Play mode is canceled, the level returns to the original level.

System setup item list

When you press SETUP in stop mode, the following settings are displayed.
The default settings are underlined.

Note

To select "Preference Page," first cancel Resume Play (page 12).

General Setup Page (page 22)

TV Display	Normal/PS Normal/LB Wide
Angle Mark	On Off
OSD Lang	English (Select the language you want to use from the displayed language list.)

Audio Setup Page (page 24)

Speaker Setup	Downmix	LT/RT Stereo
SPDIF Setup	SPDIF Output	SPDIF Off SPDIF/RAW SPDIF/PCM

Video Setup Page (page 22)

TV Type	PAL Multi NTSC
Component/S	S-VIDEO COMPONENT
DivX VOD	Done

Preference Page (pages 14, 21, 25, 40)

PBC	On Off
Audio	English (Select the language you want to use from the displayed language list.)
Subtitle	Off (Select the language you want to use from the displayed language list.)
Disc Menu	English (Select the language you want to use from the displayed language list.)
Parental	1 KID SAFE 2 G 3 PG 4 PG 13 5 PGR 6 R 7 NC 17 8 ADULT
Default	Reset

Password Setup Page (page 26)

Password Mode	On Off
Password	Change

Exit Setup Menu

Select to exit the Setup Menu.

Tuner

Presetting radio stations

You can preset up to 20 FM stations and 20 AM stations. You can then tune in any of those stations simply by selecting the corresponding preset number.

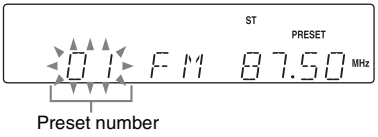
1 Press TUNER/BAND repeatedly to select “FM” or “AM.”

2 Press TUNING + or – repeatedly to tune in the desired station.

3 Press TUNER MEMORY.

A preset number flashes.

Perform steps 4 and 5 while the preset number flashes.



4 Press PRESET + or – repeatedly to select the desired preset number.

5 Press ENTER.

6 Repeat steps 1 through 5 to store other stations.

To set another station to the existing preset number

Start over from step 1. After step 3, press PRESET + or – repeatedly to select the preset number you want to store the other station.

Tip

Holding TUNING + or – in step 2, the frequency indicator changes and scanning stops when the system tunes in a station (Automatic Tuning).

Listening to the radio

You can listen to a radio station either by selecting a preset station, or by manually tuning in the station.

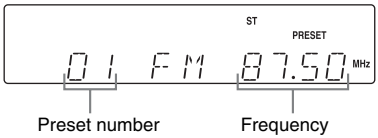
Listening to a preset station

— Preset Tuning

Preset radio stations in the tuner’s memory first (see “Presetting radio stations” (page 28)).

1 Press TUNER/BAND repeatedly to select “FM” or “AM.”

2 Press PRESET + or – repeatedly to select the desired preset station.



Listening to non-preset radio station

— Manual Tuning

1 **Press TUNER/BAND repeatedly to select "FM" or "AM."**

2 **Press TUNING + or – repeatedly to tune in the desired station.**

To cut the sound

Press MUTING.
Press MUTING again or VOLUME + to restore sound.

To listen to an FM stereo program without stereo effect

When an FM stereo program has static noise, press FM MODE repeatedly until "MONO" appears. There will be no stereo effect, but the reception will improve.

Tips

- To improve broadcast reception, adjust the supplied antennas, or connect a commercially available external antenna.
- You can record the radio programs on a tape (page 30).

Tape – Play

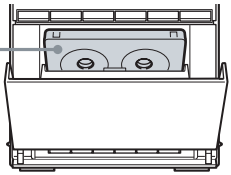
Loading a tape

1 **Open the cover in the lower part of the unit.**

2 **Press ■⏏ on the unit.**

3 **Load a recorded/recordable tape into the cassette holder.**

With the side you want to play/record facing forward.



Playing a tape

You can use TYPE I (normal) tape.

1 **Load a tape.**

2 **Press TAPE (or FUNCTION + or – repeatedly) to switch the function to TAPE.**

3 **Press ► on the unit.**

Playback starts.

Other operations

To	Do this
Stop play	Press ■⏏ on the unit.
Pause	Press ❚❚ on the unit. Press the button again to resume play.
Fast-forward or rewind	Press ◄◄ or ►► on the unit.
Cut the sound	Press MUTING. Press MUTING again or VOLUME + to restore sound.
Remove a tape	Press ■⏏ on the unit in stop mode.

Tape – Recording

Recording on a tape

You can record a disc (DVD, VIDEO CD, CD and MP3) or radio program on a tape.
Use buttons on the unit for the operation.

1 **Load a recordable tape.**

2 **Press FUNCTION repeatedly to select the desired source to record.**

- DVD: To record from this system's CD/DVD player. Playback starts automatically if a disc with auto playback function is loaded. Press ■ to stop playback. To cancel Resume Play, press ■ twice.
- FM/AM: To record from this system's tuner.

3 **Press ●►, then start playing the desired source to record.**

Recording starts.

To stop recording

Press ■⏏.

Note

You cannot listen to other sources while recording.

Tip

For recording from the tuner:
If noise is heard while recording from the tuner, move the respective antenna to reduce the noise.

Sound Adjustment

Adjusting the sound

Generating a more dynamic sound (Dynamic Sound Generator X-tra)

Press DSGX.

Each time you press the button, the front panel display changes as follows:
DSGX ⟷ No display

Singing along

You can sing along with a disc by connecting an optional microphone.

Adjusting the microphone

Use buttons on the unit for the operation.

1 **Turn MIC LEVEL to MIN to turn down the microphone control level.**

2 **Connect an optional microphone to the MIC jack.**

3 **Start playing the music.**

4 **Adjust the microphone volume by turning MIC LEVEL.**

After you have finished

Turn MIC LEVEL to MIN and disconnect the microphone from the MIC jack.

To use VIDEO CDs or DVDs

Turn on your TV and switch it to the appropriate video input.

Tip

To sing karaoke of multiplex CD, press AUDIO on the remote repeatedly during play to select "Mono Left," "Mono Right" or "Mix-Mono" (see "Changing the sound" (page 20)).

Mixing and recording sounds

You can “mix” sounds by playing one of the components and singing or speaking into a microphone (not supplied).
The mixed sound can be recorded on a tape.
Use buttons on the unit for the operation.

1 **Prepare the source you want to mix.**

2 **Load a recordable tape.**

3 **Press FUNCTION repeatedly to select the source to record (e.g., DVD).**

When you want to record from a disc, press ■ twice to cancel Resume Play.

4 **Press ●►, and then start singing, speaking or playing the desired source.**

Recording starts.

To stop recording

Press ■⏏.

Tips

- If acoustic feedback (howling) occurs, move the microphone away from the speakers or change the direction of the microphone.
- If you want to record your voice through the microphone only, you can do so by selecting the DVD function when a disc is loaded and not playing a disc.

Display

Viewing information about the disc in the front panel display

You can check the playing time and remaining time of the current track or that of the disc.

Press DISPLAY during play.

Each time you press the button, the display changes cyclically as follows:

■ When playing a DVD
Elapsed playing time of the current title →
Remaining time of the current title →
Elapsed playing time of the current chapter →
Remaining time of the current chapter

■ When playing a CD/VIDEO CD without PBC function
Elapsed playing time of the current track →
Remaining time of the current track →
Elapsed playing time of the current disc[1] →
Remaining time of the current disc[1]

■ When playing a VIDEO CD with PBC functions (Ver. 2.0)
Elapsed playing time of the current track[2] →
Remaining time of the current track[2]

■ When playing an MP3 file
Elapsed playing time of the current file[3]

■ When playing a DivX file
Elapsed playing time of the current file →
Remaining time of the current file

[1] The elapsed playing time and remaining playing time of a disc are not displayed during Random Play.
[2] May not appear with still images.
[3] The display information does not change even when you press DISPLAY during MP3 file play.

Viewing information about the disc in the on-screen display

You can check the playing time and remaining time of the current title, chapter or track.

Press DISPLAY during play.

Each time you press the button, the display changes cyclically as follows:

■ When playing a DVD
Elapsed playing time of the current title →
Remaining time of the current title →
Elapsed playing time of the current chapter →
Remaining time of the current chapter

■ When playing a CD/VIDEO CD without PBC function
Elapsed playing time of the current track →
Remaining time of the current track →
Elapsed playing time of the current disc[1] →
Remaining time of the current disc[1]

■ When playing a VIDEO CD with PBC functions (Ver. 2.0)
Elapsed playing time of the current track[2] →
Remaining time of the current track[2]

■ When playing an MP3 file
Elapsed playing time and total playing time of the current file[3]

■ When playing a DivX file
Elapsed playing time of the current file →
Remaining time of the current file

[1] The elapsed playing time and remaining playing time of a disc are not displayed during Random Play.
[2] May not appear with still images.
[3] The display information does not change even when you press DISPLAY during MP3 file play.

To turn off the display

Press DISPLAY repeatedly until the display disappears.

Note

You cannot turn off the on-screen display during CD and MP3 file play, even by pressing DISPLAY.

Controlling the TV with the remote

You can use the following buttons on the remote to operate a Sony TV.

To	Press
Turn the TV on or off	TV I/⏻ while holding down the TV button
Switch the TV's input source between the TV and other input sources	TV/VIDEO while holding down the TV button
Change the TV channels	TV CH +/– or the number buttons while holding down the TV button
Adjust the volume of the TV speaker(s)	TV VOL +/– while holding down the TV button

Using the THEATRE SYNC function

THEATRE SYNC allows you to turn on your SONY TV and this system, change the system mode to "DVD," and then switch the TV's input source you set with one button push.
Use the remote for the operation.

1 Press and hold TV/VIDEO while entering the code for the TV's input source connected to this system (see the table below) using the number buttons.

TV's input source is selected.

Number	TV's input source
0	No input source (Default)
1	VIDEO1
2	VIDEO2
3	VIDEO3
4	VIDEO4
5	VIDEO5
6	VIDEO6
7	VIDEO7
8	VIDEO8
9	COMPONENT 1 INPUT
CLEAR	COMPONENT 2 INPUT
DSGX	COMPONENT 3 INPUT
ENTER	COMPONENT 4 INPUT

2 Press and hold TV CH + while entering the code for transmit time (see the table below) using the number buttons.

The transmit time from the remote is selected.

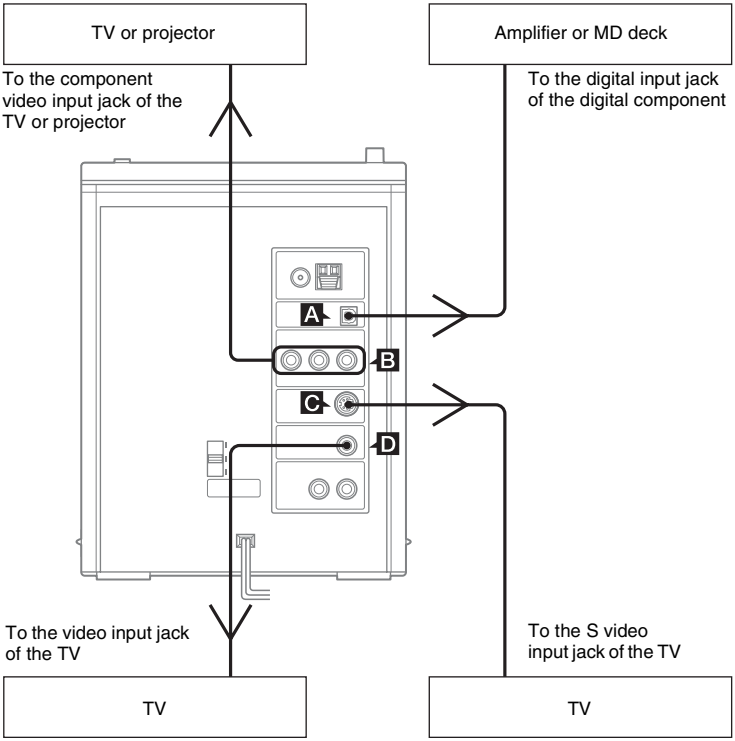
Number	Transmit time
1	0.5 (Default)
2	1
3	1.5
4	2
5	2.5
6	3
7	3.5
8	4

Notes

- This function is only for SONY TV series, however, some TV products may also not work.
- If this function does not work, change the transmit time. The transmit time varies depending on the TV.
- If distance between the TV and this system is too far, this function may not work. Install the system near the TV.
- Keep the remote pointed in the direction of the TV and this system.

Hooking up optional components

To enhance your system, you can connect optional components. Refer to the operating instructions provided with each component.


TV or projector
Amplifier or MD deck
To the component video input jack of the TV or projector
To the digital input jack of the digital component
A
B
C
D
To the video input jack of the TV
To the S video input jack of the TV
TV
TV

A DIGITAL OUT (OPTICAL) jack

Use a digital optical cord (square, not supplied) to connect an amplifier, MD deck or DAT deck with a digital optical input jack. Sound is then output when the system function is set to DVD. By connecting this system to the optical input jack of the optional amplifier equipped with Dolby Digital or DTS decoder, you can enjoy the 5.1 channel sound.
In addition, when the CD or DVD audio is linear PCM, you can make a digital recording from this system to an MD deck or DAT deck.

B COMPONENT VIDEO OUT jacks

Use an optional video cord to connect a TV. If your TV accept progressive format file signals, you must use this connection and set the progressive setting to "P-SCAN" (page 23).

C S VIDEO OUT jack

Use an S video cord (not supplied) to connect an optional TV to this jack. You can enjoy higher quality video images.

D VIDEO OUT jack

Use a video cord (supplied) to connect the video input of TV to this jack.

Notes

- When playing MP3 files, sound is not output from the DIGITAL OUT (OPTICAL) jack.
- You can record digital audio from this system only when DVD function is selected.
- You cannot make a digital recording of a copy guarded disc using a digital component connected to this system. Also, playback may not be possible depending on the connected component.
- When you connect a component that does not support Dolby Digital or DTS to the DIGITAL OUT (OPTICAL) jack and output a Dolby Digital or DTS bit stream, noise may be heard from the connected component.

Enjoying the 5.1 channel sound with the optional amplifier

1 **Connect a digital optical cord.**

See "Hooking up optional components" (page 34).

2 **Connect 6 speakers to an AV amplifier equipped with a decoder.**

For the speaker placement, refer to the operating instructions supplied with the connected amplifier.

3 **Press SETUP in stop mode.**

The Setup Menu appears.

4 **Press ← or → repeatedly to select "Audio Setup Page," then press ENTER.**

5 **Press ↑ or ↓ repeatedly to select "SPDIF Setup," then press ENTER.**

"SPDIF Output" appears.

6 **Press ENTER.**

7 **Press ↑ or ↓ repeatedly to select "SPDIF/RAW," then press ENTER.**

8 **Press SETUP to turn off the Setup Menu.**

9 **Switch the output to 5.1 channel Dolby Digital sound or 5.1 channel DTS sound.**

See "Changing the sound" (page 20).

Recording on a connected component

1 Connect a digital optical cord.

See “Hooking up optional components” (page 34).

2 Press DVD (or FUNCTION + or – repeatedly) to switch the function to DVD.

Playback starts automatically if a disc with auto playback function is loaded. Press ■ to stop playback. To cancel Resume Play, press ■ twice.

3 Start recording with the connected digital component (MD deck, etc.).

Refer to the operating instructions provided with the connected component.

4 Press ▷ (or ►II on the unit) to start playing.

Notes

- You cannot make a digital recording in the following cases.
  - Copy guarded DVDs
  - DVD Dolby Digital or DTS bit stream output
  - CD-Rs/CD-RWs recorded in music CD format
- You cannot make a recording when “SPDIF Output” under “SPDIF Setup” in “Audio Setup Page” is set to “SPDIF Off.”

Problems and remedies

Should you encounter a problem with your system, do the following:

1 Make sure the power cord and speaker cords are correctly and firmly connected.

2 Find your problem in the troubleshooting checklist below and take the indicated corrective action.

If the problem persists after doing all of the above, consult your nearest Sony dealer. Note that if service personnel changes some parts during repair, these parts may be retained.

General

There is no sound.

- Press VOLUME +.
- Make sure the headphones are not connected.
- Check the speaker connections (page 7).
- The system is in pause mode or in slow-motion play mode. Press ▷ (or ►II on the unit) to return to Normal Play.
- Set "SPDIF Output" under "SPDIF Setup" in "Audio Setup Page" to other than "SPDIF Off."

There is severe hum or noise.

- Move the system away from the source of noise.
- Connect the system to a different wall outlet.
- Install a noise filter (commercially available) to the power cord.

The remote does not function.

- Remove the obstacle.
- Move the remote closer to the system.
- Point the remote at the system's sensor.
- Replace the batteries (R6/size AA).
- Locate the system away from the fluorescent light.

There is acoustic feedback.

- Reduce the volume.
- Move the microphone away from the speakers or change the direction of the microphone.

The color irregularity on a TV screen persists.

- Turn off the TV set once, then turn it on after 15 to 30 minutes. If the color irregularity still persists, place the speakers farther away from the TV set.

Speakers

Sound comes from one channel or unbalanced left and right volume.

- Check the speaker connection and speaker placement.
- The source being played back is monaural.

Sound lacks bass.

- Check that the speaker cords are connected correctly.

DVD/VIDEO CD/CD/MP3/JPEG/DivX player

Play does not start.

- Open the disc compartment and check whether a disc is loaded.
- Wipe the disc clean (page 43).
- Replace the disc.
- Place the disc that this system can play (page 4).
- Place the disc correctly.
- Place the disc in the tray with the label side up.
- Remove the disc and wipe away the moisture on the disc, then leave the system turned on for a few hours until the moisture evaporates.
- Press ▷ (or ►II on the unit) to start play.
- The region code on the DVD does not match the system.

continued

The sound skips.

- Wipe the disc clean (page 43).
- Replace the disc.
- Try moving the system to a place without vibration (e.g., on top of a stable stand).
- Try moving the speakers away from the system, or placing them on separate stands. When you listen to a track with bass sounds at high volume, the speaker vibration may cause the sound to skip.

Play does not start from the first track.

- Cancel Random Play.
- Resume Play has been selected. Press ■ in stop mode, then start playback (page 12).
- The title, DVD or PBC menu automatically appears on the TV screen.

Playback starts automatically.

- The DVD features an auto playback function.

Playback stops automatically.

- Some discs may contain an auto pause signal. While playing such a disc, the playback stops at the auto pause signal.

You cannot perform some functions such as Stop, Search, Slow-motion Play, Repeat Play, Random Play.

- Depending on the disc, you may not be able to do some of the operations above. Refer to the operating instructions supplied with the disc.

DATA CD or DATA DVD takes a longer time to start playback.

- After the system reads all the files on the disc, playback may take more time than usual if:
  - the number of folders or files on the disc is very large.
  - the folder and file organization structure is very complex.

MP3 file cannot be played back.

- Recording was not performed according to the ISO9660 Level 1 or Level 2 format, or Joliet in the expansion format.
- The MP3 file does not have the extension ".MP3".
- The data is not stored in MP3 format.
- Playback is possible up to 16 levels.
- The disc contains more than 255 folders.
- The disc contains more than 999 MP3 files.
- The folder contains more than 640 MP3 files.

The JPEG file cannot be played.

- The data CD is not recorded in JPEG format that conforms to ISO9660 Level 1/Level 2 or Joliet.
- The JPEG file does not have the extension ".JPG" or ".JPEG".
- The data is not formatted in JPEG even though it has the extension ".JPG" or ".JPEG".
- Playback is possible up to 16 levels.
- The disc contains more than 255 folders.
- The disc contains more than 999 JPEG files.
- The folder contains more than 640 JPEG files.

The DivX file cannot be played.

- The file is not created in DivX format.
- The file has an extension other than ".AVI" or ".DIVX."
- The DATA CD (DivX file)/DATA DVD is not created in a DivX format that conforms to ISO9660 Level 1/Level 2 or, Joliet/UDF.
- The DivX file is larger than 640 (width) × 480 (height).

The sound loses stereo effect when you play a VIDEO CD or CD.

- Press AUDIO repeatedly during play to select "Stereo" (see "Changing the sound" (page 20)).
- Make sure the system is connected appropriately.

The recording was not done properly when making a digital recording from the CD/DVD player of this system to an optional component connected to the DIGITAL OUT (OPTICAL) jack.

- Audio data is output from the DIGITAL OUT (OPTICAL) jack without any sound processing, so that the audio data is output slightly ahead of the sound from the speakers. Therefore, start the optional component recording in advance when making a digital recording to a connected optional component (MD deck, etc.).

Picture

There is no picture.

- Press ▷ (or ►II on the unit).
- Check that the system is connected securely.
- The video cord is damaged. Replace it with a new one.
- Make sure you connect the system to the video input jack of your TV (page 8).
- Make sure you turn on the TV and operate the TV correctly.
- Make sure you select the video input on the TV so that you can view the pictures from the system.
- When you play a disc, make sure you set the color system correctly, according to your TV (color) system.
- Make sure you connect the system and your TV using the video cord (supplied) so that you can view the pictures.
- When connecting your TV and the VIDEO OUT jack of this system using the video cord (supplied), set the system to interlace format (page 23).
- You have set progressive format but your TV cannot accept the signal in progressive format. In this case, return the setting to interlace format (default setting) (page 23).
- Even if your TV is compatible with progressive format (525p/625p) signals, the image may be affected when you set progressive format. In this case, return the setting to interlace format (default setting) (page 23).

Picture noise appears.

- Clean the disc.
- When you play a disc, the color system is different. Set the color system to match your TV (page 22).

The aspect ratio of the screen cannot be changed even though you set "TV Display" under "General Setup Page" in the Setup Menu when you play a wide picture.

- The aspect ratio is fixed on your DVD.
- Depending on the TV, you may not change the aspect ratio.

Messages do not appear on the screen in the language you want.

- Select the language you want for the on-screen display in "OSD Lang" under "General Setup Page" in the Setup Menu (page 10).

The language for the sound track cannot be changed.

- Multilingual tracks are not recorded on the DVD being played.
- The DVD prohibits changing the language for the sound track.

The subtitle language cannot be changed.

- Multilingual subtitles are not recorded on the DVD being played.
- The DVD prohibits changing the subtitles.

The subtitle cannot be turned off.

- The DVD prohibits turning off subtitles.

The angles cannot be changed.

- Multi-angles are not recorded on the DVD being played.
- The DVD prohibits changing the angles.

Tuner

Severe hum or noise/stations cannot be received. ("ST" flashes in the front panel display)

- Set the proper band and frequency (page 28).
- Connect the antenna properly (page 7).
- Find a place and an orientation that provide good reception, then set up the antenna again. If you cannot obtain good reception, we recommend you connect a commercially available external antenna.
- The supplied FM lead antenna receives signals along its entire length, so make sure you extend it fully.
- Locate the antennas as far away from the speaker cords as possible.
- Consult your nearest Sony dealer if the supplied AM antenna has come off the plastic stand.
- Try turning off surrounding electrical equipment.

continued

A stereo FM program cannot be received in stereo.

- Press FM MODE repeatedly until "MONO" disappears.

Tape deck

The tape does not record or play, or there is a decrease in sound level.

- The heads are dirty. Clean them (page 43).
- The record/playback heads are magnetized. Demagnetize them (page 43).

The tape does not erase completely.

- The record/playback heads are magnetized. Demagnetize them (page 43).

There is excessive wow or flutter, or the sound drops out.

- The capstans or pinch rollers are dirty. Clean them (page 43).

Noise increases or the high frequencies are erased.

- The record/playback heads are magnetized. Demagnetize them (page 43).

The tape does not record.

- No cassette is loaded. Load a cassette.
- The tab has been removed from the cassette. Cover the broken tab with adhesive tape (page 43).
- The tape has wound to the end.

Optional components

There is no sound.

- Refer to General item "There is no sound." (page 37) and check the condition of the system.
- Connect the component properly (page 34) while checking:
  – if the cords are connected properly.
  – if the cord plugs are firmly inserted all the way.
- Turn on the connected component.
- Refer to the operating instructions supplied with the connected component and start playing.

If the system still does not operate properly after performing the above measures, reset the system as follows:

Use buttons on the unit for the operation.

1 Remove the disc if it is loaded.

2 Press POWER to turn off the system.

3 Hold down DISPLAY and VOLUME +, and press POWER.

Release the buttons as soon as the system turns on.

4 Wait until "FM 87.50 MHz" appears.

The system is reset to the factory settings except for DVD settings. You should set the settings you made, such as the preset stations.

To return the settings to the default settings*, perform reset as follows:

The operation can only be set using the TV screen.

1 Remove the disc if it is loaded.

2 Press SETUP.

3 Press ← or → repeatedly to select "Preference Page," then press ENTER.

4 Press ↑ or ↓ repeatedly to select "Default," then press ENTER.

"Reset" is selected.

5 Press ENTER.

It takes a few seconds to complete. Do not press I/⏻ when resetting the system.

* Except for Parental Control settings

Messages

One of the following messages may appear or flash in the front panel display during operation.

DVD/VIDEO CD/CD/MP3/JPEG/ DivX

LOAD

The disc information is being loaded.

NO DISC

- There is no disc in the unit.
- A disc that cannot be played was loaded.
- A disc with an unsupported Region code was loaded.

OPEN

The disc compartment cover is open.

Additional Information

Precautions

On operating voltage

Before operating the system, check that the operating voltage of your system is identical with the voltage of your local power supply.

On safety

- The unit is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the unit itself has been turned off.
- Unplug the system from the wall outlet (mains) if it is not to be used for an extended period of time. To disconnect the power cord (mains lead), pull it out by the plug. Never pull the cord itself.
- Should any solid object or liquid fall into the system, unplug the system and have it checked by qualified personnel before operating it any further.
- AC power cord must be changed only at the qualified service shop.

On placement

- Do not place the system in an inclined position.
- Do not place the system in locations where it is;
  - Extremely hot or cold
  - Dusty or dirty
  - Very humid
  - Subject to vibrations
  - Subject to direct sunlight.
- Use caution when placing the unit or speakers on surfaces that have been specially treated (with wax, oil, polish, etc.) as staining or discoloration of the surface may result.

On heat buildup

- Although the system heats up during operation, this is not a malfunction.
- Place the system in a location with adequate ventilation to prevent heat buildup in the system.
- If you continuously use this system at a high volume, the cabinet temperature of the top, side and bottom rises considerably. To avoid burning yourself, do not touch the cabinet.
- To prevent a malfunction, do not cover the ventilation hole for the cooling fan.

In case color irregularity is observed on nearby a TV screen

With the magnetically shielded type of speaker system, the speakers can be installed near a TV set. However, color irregularity may still be observed on the TV screen depending on the type of your TV set.

If color irregularity is observed...

Turn off the TV set once, then turn it on after 15 to 30 minutes.

If color irregularity is observed again...

Place the speakers farther away from the TV set.

IMPORTANT NOTICE

Caution: This system is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

On operation

- If the system is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lens inside the CD/DVD player. Should this occur, the system will not operate properly. Remove the disc and leave the system turned on for about an hour until the moisture evaporates.
- When you move the system, take out any disc.

If you have any questions or problems concerning your system, please consult your nearest Sony dealer.

Notes on discs

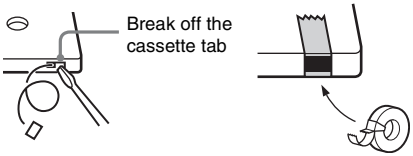
- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.
- Do not use solvents such as benzine, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, nor leave it in a car parked in direct sunlight.
- Do not use discs encircled with a protection ring. This may cause a malfunction to the system.
- When using discs that have glue or similar tacky substance on the label side of the disc or that used a special ink when the label was printed, there is a chance that the disc or label may become attached to parts inside this unit. When this occurs, it may not be possible to remove the disc, and may also cause this unit to malfunction. Be sure to check that the label side of the disc is not sticky before using.
  The following types of disc should not be used:
  – Rental or used discs with attached seals where the glue extends beyond the seal. The perimeter of the seal on the disc is tacky.
  – Discs that have labels printed using a special ink that feels tacky when touched.

Cleaning the cabinet

Clean the cabinet, panel and controls with a soft cloth slightly moistened with mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as thinner, benzine or alcohol.

To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette tab from side A or B as illustrated.



If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.

Before placing a cassette in the tape deck

Take up any slack in the tape. Otherwise, the tape may get entangled in the parts of the tape deck and become damaged.

When using a tape longer than 90 minutes

The tape is very elastic. Do not change the tape operations such as play, stop, and fast-winding frequently. The tape may get entangled in the tape deck.

Cleaning the tape heads

Clean the tape heads after every 10 hours of use. Be sure to clean the tape heads before you start an important recording or after playing an old tape. Use a separately sold dry-type or wet-type cleaning cassette. For details, refer to the instructions of the cleaning cassette.

Demagnetizing the tape heads

Demagnetize the tape heads and the metal parts that have contact with the tape after every 20 to 30 hours of use with a separately sold demagnetizing cassette. For details, refer to the instructions of the demagnetizing cassette.

Specifications

Amplifier section

European and Russian models:

DIN power output (rated): 3.6 + 3.6 watts (4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 5 + 5 watts (4 ohms at 1 kHz, 10% THD)
Music power output (reference): 8 + 8 watts (4 ohms at 1 kHz, 10% THD)

Other models:

The following measured at AC 120 V, 220 V, 240 V, 50/60 Hz
DIN power output (rated): 3.6 + 3.6 watts (4 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 5 + 5 watts (4 ohms at 1 kHz, 10% THD)

Inputs
MIC (monaural mini jack): sensitivity 1.5 mV, impedance 10 kilohms

Outputs
VIDEO OUT (phono jack): max. output level 1 Vp-p, unbalanced, Sync negative, load impedance 75 ohms
S VIDEO OUT (4-pin/mini-DIN jack): Y: 1 Vp-p, unbalanced, Sync negative, C: 0.286 Vp-p, load impedance 75 ohms
COMPONENT VIDEO OUT: Y: 1 Vp-p, 75 ohms
PB, PR: 0.7 Vp-p, 75 ohms
DIGITAL OUT (OPTICAL) (Square optical connector jack, rear panel)
Wavelength 660 nm
PHONES (stereo mini jack): accepts headphones of 8 ohms or more
SPEAKER: accepts impedance of 4 ohms

Disc player section

System: Compact disc and digital audio and video system
Laser: Laser Diode Properties
- Emission duration: continuous
- Laser Output*: Less than 1,000 µW

* This output is the value measurement at a distance of 200mm from the objective lens surface on the Optical Pick-up Block with 7mm aperture.

Semiconductor laser (DVD: λ=650 nm, CD: λ=790 nm)
Frequency response: DVD (PCM 48 kHz): 2 Hz – 22 kHz (±1 dB)
CD: 2 Hz – 20 kHz (±1 dB)

Tape deck section

Recording system: 4-track 2-channel stereo

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range: 87.5 – 108.0 MHz (50 kHz step)
Antenna: FM lead antenna
Antenna terminals: 75 ohms unbalanced
Intermediate frequency: 10.7 MHz

AM tuner section

Tuning range
Canadian model: 530 – 1,710 kHz
Other models: 531 – 1,602 kHz
Antenna: AM loop antenna
Antenna terminals: External antenna terminal
Intermediate frequency: 450 kHz

Speaker

Speaker system	Full range, bass-reflex type, magnetically shielded type
Speaker units	
Full range:	10 cm, cone type
Nominal impedance	4 ohms
Dimensions (w/h/d)	Approx. 145 × 212 × 187 mm
Mass	Approx. 1.4 kg net per speaker

General

Power requirements	
European and Russian models:	230 V AC, 50/60 Hz
Australian model:	230 – 240 V AC, 50/60 Hz
Korean model:	220 V AC, 60 Hz
Taiwan model:	120 V AC, 50/60 Hz
Other models:	120 V, 220 V, 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption:	30 watts
Dimensions (w/h/d) (excl. speakers):	Approx. 169 × 218 × 201 mm
Mass (excl. speakers)	Approx. 2.6 kg
Supplied accessories:	Remote Commander (1) R6 (size AA) batteries (2) AM loop antenna (1) FM lead antenna (1) Video cord (1)

Design and specifications are subject to change without notice.

Glossary

Auto Pause

An automatical pauses according to the signal encoded on the disc while playing a VIDEO CD. If the CD/DVD player does not resume play for a long time, press ▷ (or ►II on the unit) to resume play manually.

Chapter

Sections of a picture or a music piece on a DVD that are smaller than titles. A title is composed of several chapters. Each chapter is assigned a chapter number enabling you to locate the chapter you want.

DivX® video

Digital video technology created by DivX, Inc. Videos encoded with DivX technology are among the highest quality with a relatively small file size.

Dolby Digital

This sound format for movie theaters is more advanced than Dolby Surround Pro Logic. In this format, the surround speakers output stereo sound with an expanded frequency range and a subwoofer channel for deep bass is independently provided. This format is also called “5.1” because the subwoofer channel is counted as 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately to realize superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

DTS

Digital audio compression technology that the Digital Theater Systems, Inc. developed. This technology conforms to 5.1-channel surround. The surround channel is stereo and there is discrete sub woofer channel in this format. DTS provides the same 5.1 discrete channels of high quality digital audio. The good channel separation is realized because the all channel data is recorded discrete and processed in digital.

continued

DVD

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as a CD.
The data capacity of a single-layer and single-sided DVD, at 4.7 GB (Giga Byte), is 7 times that of a CD. Furthermore, the data capacity of a dual-layer and single-sided DVD is 8.5 GB, a single-layer and double-sided DVD 9.4 GB, and a dual-layer and double-sided DVD 17 GB.
The picture data uses the MPEG 2 format, one of the worldwide standards of digital compression technology. The picture data is compressed to about 1/40 of its original size. The DVD also uses the variable rate coding technology that changes the data to be allocated according to the status of the picture.
The audio data is recorded in Dolby Digital as well as in PCM, allowing you to enjoy more realistic audio presence.
Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD.

DVD-RW

A DVD-RW is a recordable and rewritable disc that is the same size as a DVD VIDEO. The DVD-RW has two different modes: VR mode and Video mode. DVD-RWs created in Video mode have the same format as a DVD VIDEO, while discs created in VR (Video Recording) mode allow the contents to be programmed or edited.

DVD+RW

A DVD+RW (plus RW) is a recordable and rewritable disc. DVD+RWs use a recording format that is comparable to the DVD VIDEO format.

File

Sections of a picture or a music piece on a DATA CD (MP3/JPEG/DivX file) or DATA DVD (DivX file).

Film based software, Video based software

DVDs can be classified as Film based or Video based software. Film based DVDs contain the same images (24 frames per second) that are shown at movie theaters. Video based DVDs, such as television dramas or sit-coms, displays images at 30 frames (or 60 fields) per second.

Index (CD) / Video Index (VIDEO CD)

A number that divides a track into sections to easily locate the point you want on a VIDEO CD or a CD. Depending on the disc, no indexes may be recorded.

Interlace format (Interlaced scanning)

Interlace format shows every other line of an image as a single “field” and is the standard method for displaying images on television. The even number field shows the even numbered lines of an image, and the odd numbered field shows the odd numbered lines of an image.

Menu Playback

Playback using the menu screens recorded on VIDEO CDs with PBC functions. You can enjoy simple interactive software using the menu playback function.

Multi-angle function

Various angles, or viewpoints of the video camera, for a scene are recorded on some DVDs.

Multilingual function

Several languages for the sound or subtitles in a picture are recorded on some DVDs.

Multi Session

This is a recording method that enables adding of data using the Track-At-Once method. Conventional CDs begin at a CD control area called the Lead-in and end at an area called Lead-out. A Multi Session CD is a CD having multiple sessions, with each segment from Lead-in to Lead-out regarded as a single session.
CD-Extra: This format records audio (audio CD data) on the tracks in session 1 and data on the tracks in session 2.

Parental Control

A function of the DVD to limit playback of the disc by the age of the users according to the limitation level in each country/region. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.

Playback Control (PBC)

Signals encoded on VIDEO CDs (Version 2.0) to control playback. By using menu screens recorded on VIDEO CDs with PBC functions, you can enjoy playing simple interactive programs, programs with search functions, and so on.

This system conforms to Ver. 1.1 and Ver. 2.0 of VIDEO CD standards. You can enjoy two kinds of playback depending on the disc type.

VIDEO CDs without PBC functions (Ver. 1.1 discs)

Enjoy video playback (moving pictures) as well as music.

VIDEO CDs with PBC functions (Ver. 2.0 discs)

Play interactive software using menu screens displayed on the TV screen (PBC Playback), in addition to the video playback functions of Ver. 1.1 discs. Moreover, you can play high-resolution still pictures, if they are included on the disc.

Progressive format (sequential scanning)

In contrast to the Interlace format, the progressive format can reproduce 50 to 60 frames per second by reproducing all scanning lines (525 lines for the NTSC system, 625 lines for the PAL system). The overall picture quality increases and still images, text, and horizontal lines appear sharper. This format is compatible with the 525 or 625 progressive format.

Region Code

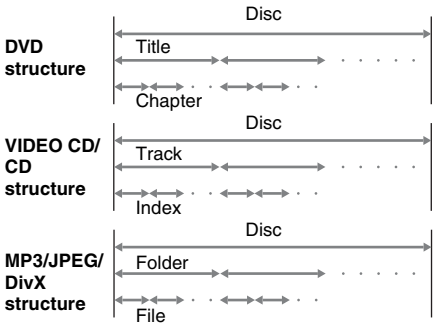
This system is used to protect copyrights. A region number is allocated on each DVD system or DVD disc according to the sales region. Each region code is shown on the system as well as on the disc packaging. The system can play the discs that match its region code. The system can also play discs with the "" mark. Even when the region code is not shown on the DVD, the region limit may still be activated.

Title

The longest sections of a picture or a music piece on a DVD; a movie, etc., for a picture piece on video software; or an album, etc., for a music piece on audio software. Each title is assigned a title number enabling you to locate the title you want.

Track

Sections of a picture or a music piece on a CD or VIDEO CD. Each track is assigned a track number enabling you to locate the track you want.



continued

VIDEO CD

A compact disc that contains moving pictures. The picture data uses the MPEG 1 format, one of the worldwide standards for digital compression technology. The picture data is compressed to about 1/140 of its original size. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures.
VIDEO CDs also contain compact audio data. Sounds outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold 6 times the audio information of conventional audio CDs.
There are 2 versions of VIDEO CDs.

- Version 1.1: You can play only moving pictures and sounds.
- Version 2.0: You can play high-resolution still pictures and enjoy PBC functions.

This system conforms to both versions.

List of button locations and reference pages

How to use this page

Use this page to find the location of buttons and other parts of the system that are mentioned in the text.

Illustration number

TUNER/BAND 23 (28)

Name of button/part — Reference page

Main unit

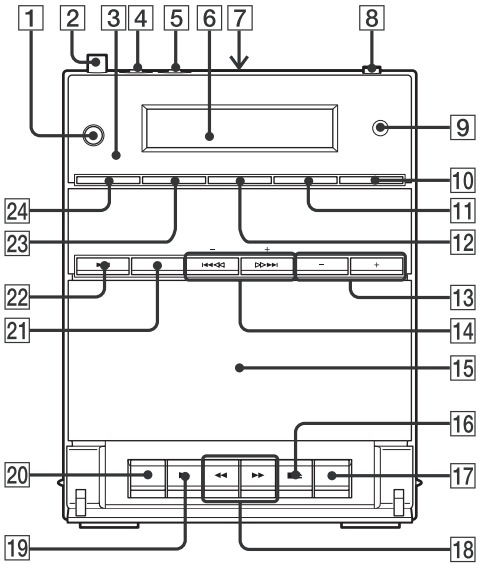
ALPHABETICAL ORDER

A – O

Cassette compartment 15 (29)
Disc compartment 7 (11)
DISPLAY 12 (32)
Display window 6
DSGX 10 (30)
FUNCTION 24 (10, 11, 13, 14, 23, 26, 29, 30, 31, 36)
MIC jack 4 (30)
MIC LEVEL 2 (30)

P – Z

PHONES jack 5
POWER (on/off) 1 (9)
PROGRESSIVE 11 (23)
Remote sensor 9
STANDBY indicator 3
TUNER/BAND 23 (28)
TUNING +/– 14 (28, 29)
VOLUME +/– 13 (12, 15, 29)



BUTTON DESCRIPTIONS

Disc operation buttons

⏏ OPEN 8 (11)
◀◀/▶▶ (rewind/fast forward) 14 (12)
⏮/⏭ (go back/forward) 14 (12)
■ (stop) 21 (10, 12, 21, 30, 31, 36)
►II (play/pause) 22 (11, 12, 36)

Tape operation button

■⏏ (stop/eject) 16 (29, 30, 31)
II (pause) 17 (29)
◀◀/▶▶ (rewind/fast forward) 18 (29)
► (play) 19 (29)
● (record)* 20 (30, 31)

* You cannot press ● alone. When you press this button, ► is also pressed.

continued

Remote control

ALPHABETICAL ORDER

A – R

ANGLE 5 (21)
AUDIO 4 (20, 30)
CLEAR 34 (33)
DSGX 24 (30, 33)
DVD 36 (10, 11, 13, 14, 23, 26, 36)
ENTER 12 25 (10, 13, 14, 18, 21, 22, 24, 25, 28, 33, 35)
FM MODE 35 (29)
FUNCTION +/– 2 (10, 11, 13, 14, 23, 26, 29, 36)
MENU/PBC 6 (13, 14, 15)
MUTING 26 (12, 15, 29)
Number buttons* 14 (12, 13, 18, 25, 33)
PAL/NTSC 38 (9)
PRESET + 28 (28)
PRESET – 32 (28)
RANDOM 17 (17)
REPEAT 15 (16)

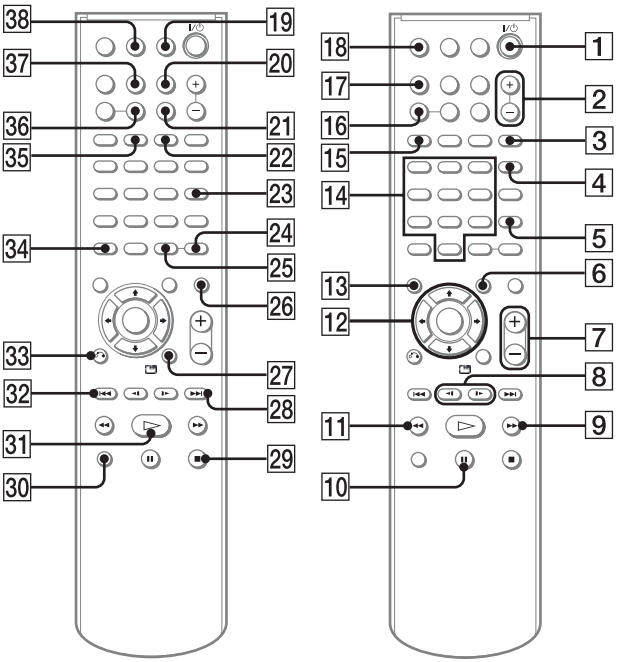
S – Z

SEARCH 3 (18)
SETUP 20 (10, 14, 21, 22, 24, 25, 27, 35)
SUBTITLE 23 (21)
TAPE 16 (29)
THEATRE SYNC 19 (33)
TOP MENU 13 (13)
TUNER/BAND 21 (28)
TUNER MEMORY 22 (28)
TUNING + 9 (28, 29)
TUNING – 11 (28, 29)
TV 30 (33)
TV CH + 28 (33)
TV CH – 32 (33)
TV/VIDEO 18 (33)
TV VOL +/–* 7 (33)
VOLUME +/–* 7 (12, 15, 29)
ZOOM 37 (12, 15)

BUTTON DESCRIPTIONS

I/⏻ (on/standby) 1 (9)
TV I/⏻ 1 (33)
◄▮ SLOW/SLOW ▮► 8 (12)
►► (fast forward) 9 (12)
▮▮ (pause) 10 (12)
◄◄ (rewind) 11 (12)
↑/↓/←/→ 12 (10, 13, 18, 21, 35)
DISPLAY 27 (32)
►►▮ (go forward) 28 (12)
■ (stop) 29 (10, 12, 21, 36)
▷ (play)* 31 (11, 36)
▮◄◄ (go back) 32 (12)
RETURN 33 (13)
-/-- 34

* The ▷, number 5 and VOLUME + (TV VOL +) buttons have tactile dots. Use the tactile dots as references when operating the system.



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